New International Patent Application
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CLAIMS

1. Transdermal formulation comprising an opioid analgesic from the phenanthrene group or a pharmaceutically acceptable salt thereof as active ingredient and an aloe composition as transdermal penetration agent.

2. Formulation according to claim 1, wherein the formulation is a patch provided with a covering layer.

3. Formulation according to claim 1 or 2, wherein the patch is a formulation selected from the group of matrix type patch, reservoir type patch, multi-laminate drug-in-adhesive type patch, and monolithic drug-in-adhesive type patch.

4. Formulation according to at least one of the preceding claims, wherein the formulation is a monolithic drug-in-adhesive type patch.

5. Formulation according to at least one of the preceding claims and especially claim 4, wherein the formulation comprises a backing, a pressure sensitive adhesive and a release liner.

6. Formulation according to at least one of the preceding claims, wherein the adhesive comprises or consists of a component selcted from the group of natural rubber; synthetic rubber; acrylic adhesive; polyvinylacetate; polydimethylsiloxane; and hydrogels, especially high molecular weight polyvinlpyrrolidone and oligomeric polyethylene oxide.

7. Formulation according to claim 6, wherein the adhesive is an acrylic adhesive.

8. Formulation according to claim 6, wherein the rubber adhesive comprises or consists of a styrene-butadiene-styrene block copolymer or a styrene-butadiene block copolymer.

9. Formulation according to claim 8, wherein the acrylic adhesive comprises or consist of a polyacrylate.

10. Formulation according to claim 9, wherein the polyacrylate is selected from the group consisting of polybutylacrylate, polmethylacrylate and poly-2-ethylhexylacrylate.

11. Formulation according to at least one of claims 4 to 10, wherein the adhesive contains a crosslinker.

12. Formulation according to at least one of the preceding claims, wherein the analgesic is buprenorphine or a pharmaceutically acceptable salt thereof.

13. Formulation according to at least one of the preceding claims, wherein the analgesic is buprenorphine or a pharmaceutically acceptable salt thereof.

14. Formulation according to at least one of the preceding claims and especially claim 12, wherein the extracting agent of the aloe extract or the vehicle is a vegetable oil.

15. Formulation according to claim 14, wherein the vegetable oil is a hydrogenated oil.

16. Formulation according to claim 14 or 15, wherein the vegetable oil is soybean oil.

17. Formulation according to at least one of the preceding claims, wherein the formulation comprises another penetration agent in addition to the aloe composition.

18. Formulation according to claim 17, wherein the additional penetration agent is selected from the group consisting of ethyl alcohol; isopropyl alcohol; octyl phenol; polyethylene glycol octylphenyl ether; oleic acid; poyethyline glycol (PEG), especially PEG 400; propylene glycol; N-decylmethyl sulfoxide; fatty acid esters, especially isopropyl myristate, methyl laurate, glycerol monooleate and propylene glycol monooleate; and N-methyl pyrrolidone.

19. Formulation according to at least one of the preceding claims, wherein the composition comprises a preservative, especially a preservative selected from the group of alcohols, quaternary amines, organic acids, parabens and phenols.

20. Formulation according to at least one of the preceding claims, wherein the formulation comprises a backing comprising or consisting of a material selected from the group consisting of polyolefin, polyester, polyvinylidene chloride, polyurethane, cotton or wool.

21. Formulation according to claim 20, wherein the backing is a polyolefine foil.

22. Formulation according to claim 21, wherein the foil has a thickness of 0.5 to 1.5 and especially 0.6 to 1.0 mm.